second unit and the third unit; and

2) establishing a point-to-point connection between the second unit and the

other unit.

Respectfully submitted,

Attorney for Applicants

LEA/kc/jam/fp

Enclosure:

Version With Markings Showing Changes Madg

Dated:

June 3, 2002

Suite 301 One Westlakes, Berwyn P.O. Box 980 Valley Forge, PA 19482-0980 (610) 407-0700

The Assistant Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington D.C. 20231 on:

VERSION WITH MARKINGS SHOWING CHANGES MADE

SPECIFICATION

Page 17, lines 13-15:

The STB 400 includes a tuner 410. The D-VHS 100 includes a VCR 100 and a tuner 120. The TV 200 has a monitor 210. The tuner 410, VCR 110, tuner [1200] 120, and monitor 210 are controlled as subunits.

Page 17, line 23 to Page 18, line 1:

In this state, an AV signal sent out from the STB 400 is issued to the D-VHS 100 and TV 200 as isochronous data via a channel of the IEEE1394 bus 300. In the monitor 210 of the TV 200, the AV signal received in the tuner 410 of the STB 400 through a satellite broadcast reception antenna 420 is displayed and issued as a picture and a sound. The D-VHS 100 records the signal issued from the STB 400 in its internal VCR [1100] 110.

CLAIMS:

- 1. (Amended) A device control method in a system [constituted by connecting]
 2. comprising
- a) a unit connected to a bus including at least one of an input plug for signal
 input and an output plug for providing a source of signal output, and
- b) a subunit having at least one of a destination plug for inputting a signal and a
 source plug for signal output to [a] the bus, said method comprising the steps of:
- a) [issuing a command, to] <u>signaling</u> the unit connected to the bus or <u>to</u> the subunit included in the unit[, for detecting] <u>to detect</u> the input plug or the source plug as [their] <u>the source of signal [source,]</u>; and
 - b) receiving the result of detection [issued from] provided by the unit or the

subunit receiving the signal [command].

- 2. (Amended) A device control method in a system [constituted by connecting]
 comprising a unit connected to a bus including an output plug for signal output to a
 bus, said method comprising the steps of:
- a) signaling the unit connected to the bus to [issuing a command for detecting]

 detect an input plug or a source plug as a signal source of a designated output plug[, to

 the unit connected to the bus]; and
- b) receiving the result of detection [issued from] provided by the unit receiving the signal [command].
- 3. (Amended) A device control method in a system [constituted by connecting]
 comprising
- a) a unit [including] having an input plug for signal input and
- b) an output plug [for] providing virtual signal output to a bus, said method comprising the steps of:
- a) detecting a virtual signal in a [specific] channel of the bus; and
- b) receiving information <u>having</u> [showing a] <u>the virtual signal</u> output [state from] <u>through</u> the output plug in the [specific] channel from a [specific] <u>first</u> unit connected to [a specific] <u>the</u> bus,
- wherein a relation between the [specific] <u>first</u> unit and [another] <u>a second</u> unit is shown by the information [showing] in the virtual signal output [state].
- 4. (Amended) The device control method of claim 3, further comprising the steps of:
- c) recognizing that [a] the first unit [connected to the bus] is issuing a first signal;

9

10

1

- e) [requesting the third unit to process] processing the first signal by the third unit [issued by the first unit as] while the second signal is being issued [from the second unit].
- 5. (Amended) The device control method of claim 4,

wherein [a specific unit other than the first unit is receiving] the <u>first</u> signal
[issued from the first unit] <u>is received by at least one of the second unit and the third</u>
unit.

- 6. (Amended) A device control method in a system [constituted by connecting] comprising
- <u>a)</u> a unit including at least one of an input plug for <u>providing a source of signal</u>
 input and an output plug for providing a source of signal output, and
- b) a subunit having at least one of a destination plug for providing a source of
 signal input and a source plug for providing a source of signal output to a bus, said
 method comprising at least one of the steps of:
- a) requesting the output plug of the unit to [set] designate the source plug of the subunit [included in the unit] as a signal source;
- b) requesting the destination plug of the subunit to [set] designate the input plug of the unit as the signal source;
- c) requesting the output plug of the unit to [set] designate the input plug of the unit as the signal source; and
- d) requesting the destination plug of the subunit to [set] designate the source plug of the subunit as the signal source.

1	7. (Amended) A device control method in a system [constituted by connecting]
2	comprising a first unit and a second unit, each of said first and second units having
3	[including]
4	a) at least one of an input plug for providing a source of signal input and an
5	output plug for providing a source of signal output, and
6	b) a first subunit and a second subunit, each of said subunits having at least one
7	of a destination plug for signal input and a source plug for providing a source of signal
8	output to a bus, comprising:
9	at least one of the steps of
10	a) requesting [a] the destination plug of [a] the first subunit included in [a] the
11	first unit to [set an] designate the input plug of the first unit as [a] the [signal] source of
12	signal, and
13	b) requesting [an] the output plug of the first unit to [set] designate the input
14	plug of the first unit as [a] the source of signal [source]; and
15	at least one of the steps of
16	c) requesting [an] the output plug of the second unit to [set a] designate the
17	source plug of [a] the second subunit included in the second unit as the source of signal
18	[source], and
19	d) requesting the output plug of the second unit to [set] designate the input plug
20	of the second unit as the source of signal [source]; and
21	the step of
22	e) requesting the input plug of the first unit and the output plug of the second
23	unit to connect to each other, after at least one of the steps a) and b) and at least one of
24	the steps c) and [to] d).

4

6

- 8. The device control method of claim 1, further comprising the step of:
- c) [obtaining information showing] determining whether or not a further subunit 2 is present [or not on] along a path from the output plug or along a path from the source 3 plug as the [signal source obtained as the] result of detection is provided by [result to] the input plug of the unit or the destination plug of the subunit. 5
- 9. (Amended) The device control method of claim 1, further comprising the 1 2 step of:
- c) [obtaining information showing] determining whether or not [the first] a 3 signal is processed [or not on] along a path from the output plug or along a path from 4 the source plug as the [signal source obtained as a] result of detection [result to] is 5 provided by the input plug of the unit or the destination plug of the subunit. 6
- 10. (Amended) The device control method of claim 9, further comprising the 1 steps of: 2
- d) [obtaining information] determining [that] whether or not the [first] signal is 3 a multiplexed signal [of the signals including] having [plural] multiple program 4 contents, and 5
 - e) [obtaining information showing] determining whether or not
- 1) there is a signal along the path from the output plug or along the path 7 from the source plug [showing] and 8
- 2) whether or not [a] part of the [program contents out of the] multiplexed 9 signal [is] has been extracted [or not, on] along the path from the output plug or along 10 the path from the source plug 11
- as the [signal source obtained as the] result of detection [result to] is provided by the 12 input plug of the unit or the destination plug of the subunit. 13
 - 11. (Amended) The device control method of claim 9, further comprising the

2 steps of:

1

- d) [obtaining the information] determining that the [first] signal includes video data, and
- e) [obtaining information showing] determining whether or not data is added [or not] to the video data of the signal along the path from the output plug or along the

 path from the source plug to display [the] contents other than the video data of the

 [first] signal[, to the video data of the first signal, on the path from the output plug or

 source plug] as the [signal source obtained as the] result of detection [result to] is

 provided by the input plug of the unit or the destination plug of the subunit.
- 1 12. (Amended) The device control method of claim 6, further comprising the step of:
- e) [obtaining information showing] <u>determining</u> whether <u>or not</u> a further subunit is present [or not on] <u>along</u> a [signal] path connecting <u>at least one of</u> the [plug and] <u>plugs designated in at least one of the steps a) to d) as</u> the signal source [set at the steps of a), b), c), and d), from the unit or the subunit].
 - 13. (Amended) The device control method of claim 6, further comprising the step of:
- e) [obtaining information showing] <u>determining</u> whether <u>or not</u> the signal is
 processed [or not on] <u>along</u> a [signal] path connecting <u>at least one of</u> the [plug] [and]

 <u>plugs designated in at least one of the steps a) to d) as signal [the] source [set at the steps of a), b), c), and d), from the unit or the subunit].</u>
- 1 14. (Amended) The device control method of claim 13, further comprising the steps of:
- f) [obtaining information showing] <u>determining</u> whether <u>or not</u> the signal [on]
 <u>along</u> the [signal] path is a multiplexed signal [including plural] <u>having multiple</u>
 program contents [or not], and

6	g) [obtaining information showing] determining whether or not [a signal
7	including a] part of the multiple program contents [out of the signal] is extracted [or
8	not on] along the [signal] path when the signal is [known to be] the multiplexed signal
9	having [including plural] multiple programs [at the step f)].

- 1 15. (Amended) The device control method of claim 13, further comprising the steps of:
- f) [obtaining information showing] <u>determining</u> whether <u>or not</u> the signal [on] along the [signal] path includes video data [or not]; and
 - g) [obtaining information showing] <u>determining</u> whether <u>or not</u> data is added [or not] <u>to the video data</u> to <u>enable display of the added data</u> [display contents other than video data of the signal, on the video data of the signal, on the signal path] when the signal [is known to] includes video data [at the step f)].
 - 16. (Amended) A device control method in a system [constituted by connecting] comprising
- a) a unit including at least one of an input plug for providing a source of signal
 input and an output plug for providing a source of signal output, and
 - <u>b)</u> a subunit having at least <u>a</u> destination plug for <u>providing a source of signal</u> input and a source plug for <u>providing a source of signal output to a bus, said method comprising the steps of:</u>
 - a) [issuing a command for designating] signaling at least one of the output plug of the unit and the destination plug of the subunit to designate the source plug of the subunit as the signal source[, to at least one of the output plug of the unit and the destination plug of the subunit included in the unit];
 - b) establishing a signal path between the source plug [designated as the signal source] and at least one of the output plug of the unit and the destination plug of the subunit; and

c) [obtaining information showing] determining from at least one of the unit and
the subunit whether or not the signal [issued] from the source plug of the subunit is
[entered from] received by the destination plug of the subunit [or not, from at least one
of the unit and the subunit.

- 1 17. (Amended) The device control method of claim 6, further comprising the step of:
- e) [when the signal source set at the steps a), b), c), and d) receives a further signal from a further signal source and issues the further signal as it is, obtaining the information] determining from at least one of the unit and the subunit that [the] a further signal [is] has issued [as it is,] from at least one of the unit and the subunit after the signal source has been designated in accordance with at least one of the steps a) to d).
 - 18. (Amended) A device control method in a system [constituted by connecting] comprising a plurality of units including an input plug for signal input and an output plug for signal output to a bus, comprising the steps of:
 - a) [issuing a command] providing a signal from a first unit to a second unit to request a point-to-point connection between the second unit and a third unit [other than the second unit]; and
 - b) establishing point-to-point connection between the second unit and the <u>third</u> unit [other than the second unit according] <u>in response</u> to the [command] <u>signal</u>.
 - 19. (Amended) The device control method of claim 18, wherein the [command] signal requesting the point-to-point connection includes information for specifying a unit as an object of the point-to-point connection.
- 20. (Amended) The device control method of claim 18, wherein the second unit [receiving a command for requesting to establish the point-to-point connection] establishes point-to-point connection with the first unit [issuing the command for requesting to establish the point-to-point connection].

2

8

9

10

i	21. (Amended) The device control method of claim 18, wherein the signa
2	[command for] requesting [to establish] the point-to-point connection includes
}	information [for] specifying a plug as an object of the point-to-point connection.

- 22. (Amended) The device control method of claim 18, further comprising the step of:
- c) [checking if] <u>determining whether or not</u> the second unit [receiving the command for requesting to establish the point-to-point connection already establishes or not in the] <u>previously established</u> point-to-point connection with a [partner] <u>unit</u> other than the <u>third unit</u> [partner of the point-to-point connection already] designated by the [command] signal, and if previously established,
 - 1) [cutting off] <u>terminating</u> the [already] <u>previously</u> established point-topoint connection [from] between the second unit and the third unit; and
 - 2) establishing a point-to-point connection between the second unit and the other unit [designated partner of the point-to-point connection].